

REMARKS

Claims 1-14 and 7-20 are pending. By this amendment, Applicants have canceled claims 15-16 and 21 without prejudice or disclaimer. Applicants reverse the right to pursue the canceled claims in a divisional or continuation application(s).

Applicants have amended claims 1-14 and 7-20. These amendments are self-evident and are supported throughout the specification and the original claims.

Applicants have also amended the Abstract. The amendment is supported at least by the original Abstract.

Applicants respectfully submit that the amendments to the claims and the Abstract do not introduce new matter. Accordingly, entry of these amendments is respectfully requested.

Objection to the Abstract

At page 2, the Office Action objects to the Abstract for being too long. Applicants have amended the Abstract. Applicants believe that the new Abstract overcomes the Examiner's objection.

Claim Rejections Under 35 U.S.C. 112, First Paragraph

At pages 2-3, the Office Action rejects claim 21 as failing to comply with the written description requirement. Although Applicants disagree with the Examiner, Applicants have canceled claim 21 without prejudice or disclaimer, thereby rendering the rejection of claim 21 moot. Applicants reverse the right to pursue claim 21 in a divisional or continuation application.

Claim Rejections Under 35 U.S.C. 112, Second Paragraph

At pages 3-4, the Office Action rejects claims 1-21 as being indefinite. Applicants have canceled claims 15-16 and 21 and amended the remaining claims. Applicants respectfully submit that these amendments obviate the Examiner's rejection. Reconsideration and withdrawal of the indefiniteness rejection of claims 1-21 are therefore respectfully requested.

Claim Rejections Under 35 U.S.C. 102(b)

At pages 5-6, the Office Action rejects claims 1-3, 15, and 21 as being anticipated by Tada, Sarker, or Pei. Applicants respectfully traverse the rejection.

Applicants have canceled claims 15 and 21, thereby rendering the rejection of these claims moot.

Applicants have also amended claims 1 and 2 by deleting “hydrogen atom” from the R7 and R8 of formula (b-1). Applicants believe that in case of Tada, Sarker and Pei, at least one of the 3,4-substituents of the thiophene group (corresponded to R7 and R8) is hydrogen. For example, in case of poly-2 of Sarker, the 3-substituent of the thiophene group is fluoro-benzene and the 4-substituents is hydrogen atom. In addition, Applicants submit that Tada, Sarker, and Pei fail to disclose a polymer which has the thiophene group as shown in formula (b-1) of the amended claims 1 and 2. Based on the foregoing, Applicants respectfully submit that Tada, Sarker, and Pei do not teach claims 1 and 2.

Because claim 3 depends from claim 2, Applicants respectfully submit that Tada, Sarker, and Pei do not teach claim 3 either.

Based on all of the above reasons, Applicants respectfully submit that Tada, Sarker, or Pei does not anticipate claims 1-3. Recondition and withdrawal of the 102(b) rejection of these claims are therefore respectfully requested.

Claim Rejections Under 35 U.S.C. 102(b) and 102(e)

At pages 6-7, the Office Action rejects claim 21 as being anticipated by Tan or Zhuang. As noted, Applicants have canceled claim 21 without prejudice or disclaimer, thereby rendering the rejection of claim 21 moot.

Claim Rejections Under 35 U.S.C. 103(a)

At pages 7-8, the Office Action rejects claims 4, 6, 8, 9, and 12-14 as being obvious over Tada, Sarker or Pei in view of Zhuang and Kamatani. Applicants respectfully traverse the rejection.

Applicants have amended claims 4, 6 and 9 by deleting “hydrogen atom” from the R7 and R8 of formula (b-1). Applicants believe that none of the cited references teaches or suggests the use of non-hydrogen moieties for both the R7 and R8 groups. Accordingly,

Applicants respectfully submit that the cited references do not teach or suggest all the elements of claims 4, 6, or 9 and, therefore, do not render these claims obvious.

Because claims 8 and 12-14 depend from claims 6 or 9, Applicants respectfully submit that claims 8 and 12-14 are also not obvious over the cited references.

Moreover, Applicants respectfully submit that the Office Action has failed to establish any motivation to combine the cited references. The Federal Circuit has repeatedly emphasized that evidence of a motivation to combine must accompany a challenge based on multiple references. *See In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999) and *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534 (Fed. Cir. 1998). *See also* MPEP §2143.01 (The prior art must suggest the desirability of the claimed invention). A statement that combination of the prior art to meet the claimed invention would have been within the ordinary skill in the art is not alone sufficient to establish a *prima facie* case of obviousness. *See* MPEP §2143.01. As the Federal Circuit observed, the “case law makes clear that the best defense against the subtle but power attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *See In re Dembiczak*, 175 F.3d 994, 998, 999 (Fed. Cir. 1999).

Based on all of the above reasons, Applicants respectfully request the Examiner to reconsider and withdraw the 103(a) rejection of claims 4, 6, 8, 9, and 12-14.

Claim Rejections Under 35 U.S.C. 103(a)

At pages 8-10, the Office Action rejects claims 1-12 and 15-18 as being obvious over Zhuang in view of Tada, Sarker or Pei. Applicants respectfully traverse the rejection.

Applicants have canceled claims 15-16, thereby rendering the rejection of these claims moot.

Applicants have amended claims 1, 2, 4, 6, 9, and 11 by deleting “hydrogen atom” from the R7 and R8 of formula (b-1). As discussed above, Applicants believe that none of the cited references teaches or suggests the use of non-hydrogen moieties for both the R7 and R8 groups. Accordingly, Applicants respectfully submit that the cited references do not teach or suggest all the elements of claims 1, 2, 4, 6, 9 or 11 and, therefore, do not render these claims obvious.

Because claims 3, 5, 7-8, 10, 12, and 17-18 depend from claims 2, 4, 6, 9, or 11,

Applicants respectfully submit that claims 3, 5, 7-8, 10, 12, and 17-18 are also not obvious over the cited references.

Moreover, Applicants respectfully submit that the Office Action has failed to establish any motivation to combine the cited references. The Federal Circuit has repeatedly emphasized that evidence of a motivation to combine must accompany a challenge based on multiple references. *See In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999) and *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534 (Fed. Cir. 1998). *See also* MPEP §2143.01 (The prior art must suggest the desirability of the claimed invention). A statement that combination of the prior art to meet the claimed invention would have been within the ordinary skill in the art is not alone sufficient to establish a *prima facie* case of obviousness. *See* MPEP §2143.01. As the Federal Circuit observed, the “case law makes clear that the best defense against the subtle but power attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *See In re Dembiczak*, 175 F.3d 994, 998, 999 (Fed. Cir. 1999).

Based on the foregoing, Applicants respectfully request the Examiner to reconsider and withdraw the 103(a) rejection of claims 1-12 and 15-18.

Claim Rejections Under 35 U.S.C. 103(a)


At pages 10-11, the Office Action rejects claims 13, 14, 19, and 20 as being obvious over Zhuang in view of Tada, Sarker or Pei and further in view of Kamatani. Applicants respectfully traverse the rejection.

For the reasons set forth above, Applicants respectfully submit that the above cited references do not render obvious claims 6, 9, and 11. Because claims 13, 14, 19, and 20 depend from claims 6, 9, or 11, Applicants respectfully submit that claims 13, 14, 19, and 20 are also not obvious over the above cited references. Reconsideration and withdrawal of the 103(a) rejection of claims 13, 14, 19, and 20 are therefore respectfully requested.

Conclusion

Applicants believe that the present application is in condition for allowance in view of the above amendments and remarks. Notice of allowance is therefore earnestly sought. Should a conference would expedite prosecution of the instant application, the Examiner is invited to telephone the undersigned to arrange such a conference.

Respectfully submitted,



Jeffrey L. Costellia
Registration No. 35,483

NIXON PEABODY LLP
Suite 900
401 9th Street, N.W.
Washington, D.C. 20004-2128
(202) 585-8000